

Title (en)
Apparatus and method for controlling electric car.

Title (de)
Vorrichtung und Verfahren zum Regeln eines elektrischen Fahrzeugs.

Title (fr)
Appareil et méthode pour commander un véhicule électrique.

Publication
EP 0323837 B1 19941012 (EN)

Application
EP 89100099 A 19890104

Priority
JP 38488 A 19880106

Abstract (en)
[origin: EP0323837A1] A PWM (pulse width modulation) inverter (5) generating an a.c. output having a variable voltage and a variable frequency supplies a.c. power to linear induction motors (61 to 64). An electric car supported by wheels (8) is driven by a driving torque produced by the linear induction motors. While the electric car is running, the motor torque varies due to various factors among which a variation of the air gap length is representative. The power factor cos phi of the PWM inverter is detected to calculate the motor torque, and the output voltage of the PWM inverter is regulated or mechanical brakes (9) are controlled so as to compensate the torque variation. Thus, the variation of the air gap length, which is representative of the factors giving rise to torque variations and which has been difficult to be detected, can be reliably detected to permit torque control according to the torque variation of the linear induction motors (61 to 64).

IPC 1-7

B60L 15/00

IPC 8 full level

B60L 9/18 (2006.01); **B60L 13/03** (2006.01); **B60L 15/00** (2006.01)

CPC (source: EP US)

B60L 15/005 (2013.01 - EP US); **B60L 2200/26** (2013.01 - EP US); **B60L 2220/12** (2013.01 - EP US); **Y02T 10/64** (2013.01 - EP US)

Cited by

CN102328601A; CN103192725A; DE102019113772A1; WO9305978A1

Designated contracting state (EPC)

CH DE FR GB LI

DOCDB simple family (publication)

EP 0323837 A1 19890712; EP 0323837 B1 19941012; CA 1336014 C 19950620; DE 68918709 D1 19941117; DE 68918709 T2 19950216;
JP 2764723 B2 19980611; JP H01177801 A 19890714; US 4900992 A 19900213

DOCDB simple family (application)

EP 89100099 A 19890104; CA 587604 A 19890105; DE 68918709 T 19890104; JP 38488 A 19880106; US 29308089 A 19890103